

ABSTRACT OF THE DISCLOSURE

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When a send packet from a slave station and a send packet from a relay station are simultaneously sent to other relay station, the collision of the send packets against each other is detected, and the backoff time of the collided packet is calculated based on the hop count recorded in a hop count recording field of the collided packet. Therefore, the backoff time is set so that the backoff time decreases with increasing the hop count. This increases the probability of resending of the packet without collision with other packet in the resending processing, and enables the packet having a larger hop count to be preferentially sent. By virtue of this construction, a priority data transfer method can be realized which, when collision of a packet against other packet has occurred, performs resend processing based on the priority level of the packet.

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